# Ms. Suzanne Smith Recycling Manager, MCRD San Diego Commitment, Leadership and Innovation



1999 Secretary of Defense Environmental Security Award Nomination Recycling - Individual/Team

## **BACKGROUND**

#### **Position Description**

Ms. Suzanne Smith is currently in a trainee position at Marine Corps Recruit Depot San Diego (MCRD). She began as a WG-06 and was promoted to the WG-07 level in November 1999. She reports directly to the Environmental Office of the Public Works Branch within the Facilities Division. MCRD's Solid Waste and Recycling Programs were assigned to Ms. Smith in September 1998. Ms. Smith is directly responsible for all recycling efforts aboard MCRD, including collection, separation, and processing of products or other materials recovered from the solid waste stream. In addition, she prepares reports and documentation related to the management of solid waste and recycling as required by Federal, state, and local regulations as well as Marine Corps policy.



## The MCRD Recycling Program

The primary mission of MCRD is providing recruit training to newly enlisted personnel. Therefore, relative to other Marine Corps installations, the environmental impact of MCRD's operations and activities is limited. However, due to the large number of Recruits processed, solid waste management is the largest area of environmental focus.

MCRD has established an outstanding qualified recycling program. Ms. Smith was assigned responsibility for MCRD's Solid Waste and Recycling Programs in September 1998. At that time, MCRD's Recycling Program was operated by a private contractor. Ms. Smith evaluated the Program and determined that under this arrangement, MCRD received no revenue for the recycled materials. Ms. Smith evaluated alternatives to current operations, including regionalization. After conducting a detailed review of the Program, Ms. Smith determined that the Program would be run more efficiently and cost effectively by MCRD staff instead of contractors. The increased attention given to the Program as a result of this decision is evident in the accomplishments discussed later in this document.

#### "Starting from Scratch"

MCRD began the program with minimal resources. A Depot Recycling Center was established in an old warehouse. MCRD obtained discarded recycling equipment, such as bailers and collection bins, from other installations. Collapsible, reusable material sorting bins were fabricated from chicken wire and pallets. Recycling Center offices were furnished with discarded furniture and old computers. The Recycling Program borrowed trucks and forklifts from MCRD's Motor Transport Division. The Program used the Recruit Training Regiment's washers and dryers to launder recyclable clothing. The Recycling Program staff conducted extensive research to identify and obtain new "signature" Marine Corps red and gold recycling bins at minimal cost. Finally, the Program was implemented with minimal staffing resources, including Ms. Smith, serving as Recycling Program Manager, a Marine Lance Corporal or Sergeant when available, and intermittent Recruit assistance. Groups of Recruits are assigned to work at the Recycling Center during the Mess and Maintenance Week of Recruit training. While the Recruits' assistance is beneficial, the constant turnover of Recruits requires significant training and management oversight from the Ms. Smith.

Materials currently accepted for recycling at MCRD include:

- Clear glass
- Colored glass
- Aluminum cans
- Steel cans
- Mixed plastics
- Cardboard

- Computer paper
- White ledger paper
- Newspaper
- Mixed paper
- Scrap metal
- Steel

- Copper
- Brass
- Wood pallets
- Broken bulky goods
- Other bulky goods
- Textiles and rags

Recycled materials are managed in the following manner:

- Wood pallets are stored at one central accumulation site and then collected, refurbished, reconstructed, and reused.
- Broken bulky goods include white goods (clothes washers and dryers, stoves, refrigerators), brown goods (electronic items, VCRs, computers, televisions), and other bulky goods (small appliances, furniture, mattresses). These items are directed to the MCRD Recycling Center for sale and reuse or recycling as scrap metal.
- Some used tires are returned to Camp Pendleton for reuse/retreading or processing/recycling, while others are recovered for reuse or recycling by Marine Corps Community Services (MCCS).
- Motor oil, antifreeze, and used oil filters are recycled through MCCS with the support of a private contractor.

 Grasscycling and mulching of yard wastes are practiced extensively; it is estimated that 90 percent of grass clippings are grasscycled and 75 percent of the yard waste processed by base personnel is applied as mulch during landscaping activities at MCRD.

MCRD tracks local prices of recyclable materials and sells the materials to contractors at various times throughout the year. Often, MCRD will hold materials until prices increase, thereby increasing the profits of resale. In most instances, a contractor hauls the materials from the storage area to facilities off the base. There are 26 recycling drop-off locations and accumulation centers located throughout the Depot.



Various Recycling Collection Centers

These containers are positioned across the base at locations close to the point of waste generation. Shops generating the recyclable materials are responsible for placing materials in the containers.

The Depot Recycling Center is staffed by Ms. Smith, another civilian, one Marine, and Recruits. Recyclable materials are collected from industrial shops and offices. The Recycling Center collects aluminum, aluminum cans, scrap metal, stainless steel, light and heavy steel, brass, copper, wire, cardboard, computer paper, colored paper, office paper, newspaper, mixed paper, books and magazines, wood and pallets, plastic (specific grades), and glass containers. The Recycling Center separates the paper that is received into magazines, colored paper, and white paper and separates the glass as clear, green, brown, and California CRV. The center bales cardboard and plastic.

Used recruit clothing, shoes and equipment are also collected, sorted and processed at the Recycling Center.



Recruits at the Recycling Center

The Recycling Program also collects and processes recyclable construction and demolition materials from large construction projects aboard the Depot. Collection bins are provided at constructions sites to segregate and collect materials such as metal and wire, reusable fixtures, windows, doors and aged timbers. To ensure the success of this effort, Recycling Program staff provide training to the construction crews to inform them of recycling opportunities.

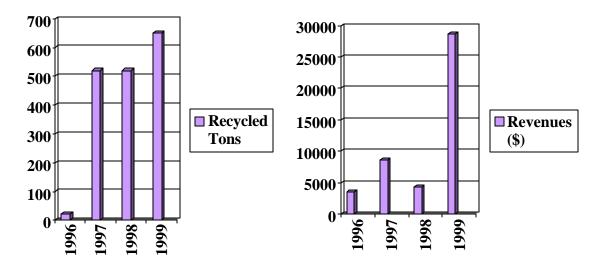
Ms. Smith has managed to revamp the Solid Waste and Recycling Programs at MCRD with limited staff. With the help of Recruits during the Mess and Maintenance Week of their training, one Marine, and one civilian employee, she manages all recycling operations, including pickup and drop off of bins, sorting, baling, and packaging several hundreds of tons of recyclable materials; selling or finding alternative innovative uses for materials; partnering with the community; and advertising the Program through a variety of methods such as awareness training.

## **ACCOMPLISHMENTS**

#### **How Well She Has Managed the Program**

The success of MCRD's Recycling Program has resulted in a substantial reduction in solid waste disposal. Between 1996 and 1998, MCRD disposed of an average of 2,300 tons of solid waste annually. In 1999, MCRD disposed of 2,000 tons of solid waste. This reduction saved MCRD over \$36,000 in costs for solid waste disposal in just one year, representing a 41 percent decline in annual solid waste disposal costs. These materials, which would have otherwise been disposed of as solid waste, were recycled, resulting in revenue almost \$30,000.

Ms. Smith's commitment to recycling efforts at MCRD also includes her vigilant concern for cost savings. The Depot chose to donate the initial stockpile of Recruit recyclable materials and goods to charity, but in the future, recyclable materials will be put up for sale to continue to maintain the Recycling Center aboard MCRD as completely self-sufficient. In 1997 and 1998, MCRD recycled slightly more than 500 tons of goods and materials each year. In 1999, through the efforts of Ms. Smith, MCRD recycled approximately 650 tons. This significant improvement in tons recycled along with her identification of new recycling opportunities aboard MCRD resulted in an astonishing 665 percent increase in total recycling revenue, from approximately \$4,300 in 1998 to \$28,600 in 1999. These results are shown in the figures below.



It should be noted that the reduction in solid waste disposal costs and increase in recycling revenue were achieved in just seven months. Currently, MCRD's Recycling Program has \$49,000 in its account. The Recycling Material Selection Review Board (RMSRB), led by Ms. Smith, is meeting in January 2000 to discuss

the proceeds and identify areas where this money may be spent to further the available recycling opportunities aboard MCRD.

#### **Operational Improvements**

Ms. Smith, after reviewing the operations of Solid Waste and Recycling Programs at MCRD, altered the Program in March of 1999, realizing that the Programs could be run much more efficiently through the use of MCRD staff instead of contractors. Ms. Smith realized that the contractor-run operation was resulting in contamination in the recycling bins from infrequent pick-ups and dropoffs. She also realized the importance of educating all Depot personnel of recycling opportunities available aboard MCRD. She persuaded MCRD to run the Programs internally and has proven that the costs of the Program can be minimal.

Ms. Smith has used her professional relationships with other Marine installations to obtain and "put to good use" recycling equipment from other Programs that no longer need the equipment. In this way, she is supporting the entire Marine Corps in its goal to manage its infrastructure efficiently and eliminate the costly purchases associated with mission activities.

#### Recruit Recycling Program

In 1999, MCRD developed and implemented a unique and innovative recycling initiative that is a first for the Department of Defense. The Recruit Recycling Program collects discarded but usable personal materials for reuse, resale, and donation to charities.

Ms. Smith developed and instituted a Program at MCRD that does not exist at any other military installation in 1999. MCRD is tasked with providing training to approximately 20,000 Recruits each year. Upon completion of the 13-week training cycle, the new Marines typically dispose of substantial amounts of clothing and other usable items before moving on to their next duty station. These discarded materials include running shoes, towels, clothing, web belts, personal hygiene gear, and coat hangers. Ms. Smith instituted a Program to provide recycling bins at Recruit barracks, and to educate and encourage Recruits to recycle these materials rather than disposing of them as solid waste. The bins are brought to the Depot Recycling Center where the materials are sorted by Recruits and made available for incoming Recruits. In addition to reducing the Depot's disposal costs, this Program helps reduce expenses for new Recruits.

In an effort to reach out to the community, Ms. Smith has identified and coordinated periodic donations of the aforementioned materials to local charities. Examples include the following:

- In March 1999, the Recruit Recycling Program donated more than 3 tons of clothing and other usable material to the City of San Diego's Homeless Services Program, including 1,900 pairs of running shoes, 3,400 T-shirts, 3,200 towels and 3 pallets of civilian clothes.
- In June 1999, the Recruit Recycling Program donated 3,371 pairs of socks to the Brother Benno Foundation, a nonprofit ecumenical group that runs several homeless shelters in San Diego County. In addition to benefiting the needy, this contribution diverted 545 pounds of solid waste from the landfill.
- In November 1999, the Recruit Recycling Program donated more than 3,000 pairs of shoes to the Saint Vincent de Paul Village Annual Shoe Drive hosted by radio talk show host Roger Hedgecock.
- In June 1999, the Recruit Recycling Program donated 3,371 pairs of socks to the Brother Benno Foundation, a nonprofit ecumenical group that runs several homeless shelters in San Diego County. In addition to benefiting the needy, this contribution diverted 545 pounds of solid waste from the landfill.
- In November 1999, the Recruit Recycling Program donated more than 3,000 pairs of shoes to the Saint Vincent de Paul Village Annual Shoe Drive hosted by radio talk show host Roger Hedgecock.
- In December 1999, 4,000 pounds of clothing and shoes were donated to the Vietnam Veterans of San Diego homeless shelter.
- Sunscreen and towels were donated to the City of San Diego Junior Life Guard Program.
- Clothing items, including sweatshirts, sock and shorts were donated to the Boy Scouts Summer Camp Program.
- Clothing and shoes were donated to Civil Air Patrol Squadron 55 which operates a youth drug awareness program in conjunction with the Army National Guard, the California Counter-Drug Program, and the Drug Enforcement Agency.

In addition, the Recruit Recycling Program assisted the USS MERCY hospital ship in acquiring damaged bayonet training dummies and clothing for reuse as casualty training aids during quarterly medical triage training events. The value of these training dummies is estimated at \$60,000.

The Recycle Center has also provided clothing items to deploying ships, Marine training units and individual commands from other installations. Towel reuse was expanded through the Semper Fit programs that are sponsored by the MCCS Recreation Centers and Gyms. The Recycling Program provides towels to the

MCRD Fitness Center, and has recently started giving towels (by the thousands) to fitness centers at Camp Pendleton and MCAS Miramar. This action is saving both installations thousands of dollars spent replacing towels removed from the gyms.

Before Ms. Smith instituted the Recruit Recycling Program, approximately 20 cubic yards per week of reusable Recruit clothing and other items were being transported to area landfills. There has been a 75 percent reduction in this volume in just one year. The success of the Recruit Recycling Program speaks to Ms. Smith's creativity, initiative, and hard work.

#### Rag Recycling Program

MCRD has established a rag recycling program that has nearly 100-percent participation across the Depot. Rags are collected and recycled at an off-site facility by a contractor. Because these rags would likely have to be managed as hazardous waste, the rag recycling program achieves considerable savings relative to disposal and has contributed significantly to MCRD's reduction in hazardous waste generation.

Because the rags sometimes contain traces of petroleum, the Paint Shop has elected not to participate in the program. However, in order to minimize the amount of rags disposed, the Paint Shop uses and reuses rags until they are threadbare.

## Paint Recycling Program

Between 1993 and 1998, MCRD reduced its hazardous waste generation by approximately 92 percent. Part of this reduction was achieved by modifying painting operations aboard the Depot. This included substituting water-based paint for oil- or solvent-based formulations, and by instituting a Paint Recycling Program.

A number of different shops and activities use paint aboard the Depot. Prior to the establishment of the Paint recycling Program, unused paint and partially filled paint containers were disposed of as hazardous waste. Under this program, personnel are encouraged to turn in unused paint to the Paint Shop where it can be combined and reused.

## The Program's Technical Merits

The most significant problem with MCRD's contractor-operated recycling program was that recyclable materials were collected, stored, and segregated in a manner that rendered them unmarketable. Ms. Smith remedied this deficiency by obtaining several pieces of recycling equipment, including improved storage containers, cardboard bailers, and a can crusher (shown below) for the Mess Hall that individually washes and crushes cans.



CanPactor $\hat{\mathbf{O}}$ Can Crusher at the Mess Hall

MCRD's solid waste disposal records show that using one CanPactor<sup>TM</sup> unit saved approximately \$7,000 in annual solid waste disposal costs. The crushed cans were sold for \$150. Prior to using this system, cans were cleaned by Recruits using hoses and large amounts of water. Using the CanPactor<sup>TM</sup> eliminates this practice, and conserves substantial amounts of water in the process.

This equipment reduces labor, improves segregation, and allows recyclable materials to be stored for longer periods of time without degrading its value. The ability to store the material longer allows Ms. Smith to hold the material and sell it at a higher price.

#### **How the Program Supported the Military Mission**

MCRD's primary mission is to provide for the reception, processing, and training of male enlisted personnel upon their initial entry into the Marine Corps. Through

the Recycling Program, Ms. Smith contributes to this mission by achieving cost savings for the Depot and improving its image in the community.

Unlike basic training in any other branch of service, Marine Recruit Training focuses on instilling a set of values, an identity, and an ethos. In addition to Courage and Commitment, a central Marine value and source of pride is the concept of "doing more with less." Recruits are taught that throughout their storied history in engagements such as Guadalcanal, Chosin Reservoir, and Khe Sanh, Marines have repeatedly performed missions and achieved objectives while being vastly outnumbered and poorly equipped and supplied.

By educating Recruits about the value of recycling, Ms. Smith helps to reinforce this lesson of resourcefulness. She also provides the Recruits with their first environmental general awareness training. It is hoped that they will take this awareness with them as they disperse throughout the Marine Corps.

## How Effectively the Program's Lessons Learned May be Transferred from the Nominee to Others

The central accomplishment of the Recruit Recycling Program, namely diverting usable goods from solid waste disposal, can be transferred to other Marine and Department of Defense installations. Ms. Smith has demonstrated that even with minimal equipment and staff, this program can be highly successful at any installation.

In an effort to foster this transfer, Ms. Smith is scheduled to brief the Combined Services Recycle Working Group on the successes of the Recruit Recycling Program on February 24, 2000.

## Success in Involving Base Personnel, Residents and the Local Community in the Program

Through Ms. Smith's persistent efforts to work with and understand the mission and processes of every activity, command, and tenant aboard MCRD, she has been able to identify recycling opportunities. She conducts weekly visits to observe the activities of all activities aboard the Depot to ensure that she is providing the most effective support possible in their recycling efforts. Rather than mandating requirements, Ms. Smith works with each shop, tenant and activity to develop and implement practical recycling solutions. As a result, the Recycling Program has become a very tangible part of all activities and processes aboard MCRD. Ms. Smith has been solely responsible for spreading the word about the opportunities to, and benefits of, recycling.

Ms. Smith has made substantial contributions to the City and County of San Diego communities. She routinely looks for new ideas to improve the program and often involves local government and community groups. For example, Ms. Smith is coordinating a composting demonstration with the City of San Diego.

This demonstration project, which is to be conducted at the Miramar Landfill, will use food waste from MCRD's Mess Hall that would otherwise be disposed of as solid waste.

In addition to developing and implementing the Recruit Recycling Program, Ms. Smith has also sought out organizations with specific material needs. For example, the Brother Benno Foundation, Inc., a non-profit ecumenical group which runs several homeless shelters in the North San Diego County area, serves approximately 250 meals a day, provides shower and clothing facilities, provides bus tickets and food packs, and helps the homeless obtain identification cards. Donations to the Brother Benno Foundation often come in the form of clothing, but people do not often think of the need for some of the most basic garments, including socks. When Ms Smith learned of the foundation's needs, she donated 3,371 pairs of socks that would have gone to the landfill. This exemplifies another instance when Ms. Smith was able to effectively place items for reuse through her ingenuity and commitment to sharing her recycling opportunities with the local community.



Vietnam Veterans of San Diego

The Recycling Program's success at incorporating and involving nearly every tenant, command, and activity aboard the Depot is a result of its focus on awareness training. The program's inclusion of non-traditional items such as office furniture, window blinds, and carpet is further proof that military and civilian personnel are "getting the message." Depot personnel have learned to ask, "I wonder if this can be recycled?" before throwing an item in the trash.

As previously mentioned, the Recycling Program depends on the help of Recruits. Groups of Recruits work at the Recycling Center, sorting, bailing, and packaging recyclable materials. This experience provides the Recruits with effective general awareness training that they will spread throughout the Marine Corps.

The Recycling Program also sponsors activities to teach and encourage children to recycle. These events include Earth Day, Halloween, the annual MCCS Christmas Party, MCCS Family Summer Picnic, and various battalion picnics. Activities are provided where children can participate in arts and crafts that promote recycling awareness, such as building bird feeders and birdhouses out of recyclable materials.

#### **Breadth of the Program**

During a recent revision of MCRD's Pollution Prevention Plan, the contractor preparing the plan update noted that "MCRD's Recycling Program had addressed and incorporated practically every solid waste generating process aboard the Depot." That virtually every tenant and command aboard the Depot participates in the Recycling Program and personally knows Ms. Smith is a testament to her ceaseless efforts to identify new recycling opportunities and educate Depot personnel.

## A Positive Public Image

In addition to MCRD, San Diego County is home to Marine Corps Air Station (MCAS) Miramar and Marine Corps Base (MCB) Camp Pendleton, as well as numerous Navy installations. There is a small, yet vocal minority of community groups who oppose flight operations at MCAS Miramar and Camp Pendleton. In an effort to restrict or completely eliminate flight operations at these installations, these groups have attempted to portray the Marine Corps as a willful, intruding nuisance that is insensitive to the concerns and indifferent to the safety of the community. Ms. Smith's efforts and recognition from the City of San Diego provide ammunition against this effort, and demonstrate that the Marine Corps cares about the community, and is committed to being an environmental steward and good neighbor.

## **AWARDS AND SERVICES**

For her tireless efforts during 1999, the City of San Diego awarded Ms. Smith its Recycler of the Year award on behalf of the Depot. MCRD was one of 12 corporations, businesses, and military institutions to receive the award. The award cited Ms. Smith's commitment to being a good environmental neighbor to the City of San Diego as exemplified best by her efforts to aid local charities.

Representatives from the City of San Diego Homeless Services, San Diego Rescue Mission, Saint Vincent de Paul Village, Vietnam Veterans of San Diego, Boy Scouts Of America, Civil Air Patrol Squadron 55, Army National Guard, and the San Diego Junior Life Guard Program are among the organizations that have received recyclable goods and materials. These donations to area charities accomplish three very positive aims: it helps to conserve the environment by significantly decreasing MCRD's contribution to area landfills; it provides valuable and necessary goods to the local homeless population; and it contributes to the very important neighborly relationship that MCRD has with the City and County of San Diego.

#### CONCLUSION

Through her creativity, intelligence and persistence, Ms. Suzanne Smith has reinvigorated MCRD's Recycling Program and transformed it into a model for other installations. The City of San Diego has recognized and commended her efforts. She is solely responsible for the achievements of the Program, which in addition to its financial success and environmental benefit, has enhanced the image of MCRD and the Marine Corps. The Recycling Program is one of which MCRD is most proud, and Ms. Suzanne Smith is solely responsible for the Program's accomplishments. She is, without a doubt, worthy of the Secretary of Defense Environmental Security Individual Award for Recycling at a Non-Industrial Installation.

## **INSTALLATION INFORMATION**

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## **NOMINATION SUMMARY**

In the span of less than a year, Ms. Suzanne Smith has established an effective recycling program that has increased recycling revenues by 665 percent and decreased solid waste disposal costs by 41 percent aboard Marine Corps Recruit Depot (MCRD) San Diego. A unique element of MCRD's Recycling Program developed by Ms. Smith is the Recruit Recycling Program, which collects discarded but usable personal materials for reuse, resale, and donation to San Diego area charities. Ms. Smith is solely responsible for the achievements of the Program, which in addition to its financial success and environmental benefit, has enhanced the image of MCRD and the Marine Corps. In recognition of these accomplishments, the City of San Diego named Ms. Smith the 1999 Recycler of the Year.